

REMARKS

Claims 1-11 are pending in the present application.

Withdrawal, in view of applicant's submission of December 13, 2007, of the rejection of claims 1-11 under 35 U.S.C. § 102(e), as being anticipated by Grilli et al [U.S. Patent No. 6,438,117] which was contained in the previous Office Actions, is hereby acknowledged.

35 U.S.C. § 103 (Non obviousness)

The present Office Action contains rejection of claims 1-11 under 35 U.S.C. § 103(a), as being obvious over Grilli et al. (U.S. Patent No. 6,438,117) in view of Raith (U.S. Patent No. 5,903,552), the latter being a newly cited reference.

The applicant respectfully requests reconsideration of this ground of rejection in view of the remarks below.

The invention as recited in claim 1 is a method for allocating radio resources for the establishment of an outgoing call originating from a mobile terminal of a first system for radiocommunications with mobiles having a given radio interface and a mutual help channel, via a base station of a second system for radiocommunications with mobiles (emphasis added). The second system is distinct from the first system, and the first and second systems comprise respective terminals and base stations and have respective radio interface which are mutually incompatible. According to the claimed invention, further, the base station (i.e., of the second system) carries out the steps of:

- a) monitoring the mutual help channel of the first system; and
- b) in case of detection by the base station of a given pattern transmitted by the mobile terminal on said mutual help channel, allocating a traffic channel emulating the radio interface of the first system for communication with the mobile terminal (emphasis added).

* * *

Grilli et al. pertains to hybrid cellular communications networks, incorporating both GSM and CDMA elements. It thus describes methods and apparatus for use in a mixed TDMA/CDMA cellular communications network, in particular methods and apparatus enabling handover of a subscriber unit between base stations without interrupting communications (col. 2, lines 7-13). Thus, all the features described in Grilli et al. which are

referred to by the Examiner in the Office Action are features of methods and apparatus enabling handover of a communication in progress between TDMA and CDMA base stations, namely base stations having respective air interface of different types.

In the present Office Action, the Examiner states that Grilli and the claimed invention have in common all the features listed in Claim 1 except that Grilli fails to disclose monitoring mutual help channel of the first system by the base station of the second system. The Examiner then refers to Raith which, according to the Examiner, discloses the feature missing in Grilli. More precisely, the Examiner considers that the adjunct system disclosed in col. 5, lines 62-67 and col. 6, lines 1-63, anticipates the claimed mutual help channel of the first system according to the invention.

Nevertheless, the applicant respectfully traverses both aspects of the above Examiner's reasoning on inventive step as summarized above, for the reasons which shall now be discussed in more detail below.

Initially, Applicant considers that the Examiner's analysis of Grilli et al. as disclosing all the claimed features except the mutual help channel of the first system is incorrect.

Indeed, as it was readily and extensively explained in the response to the previous Office Action, Grilli only discloses a mixed GSM/CDMA cellular communications system which includes both TDMA and CDMA base stations jointly controlled by a mobile switching center (MSC). A subscriber unit in the system, also referred to as a mobile station (MS), is capable of communicating with both types of base stations by appropriately switching between TDMA and CDMA air interfaces, while preferably using GSM network protocols over both types of interface (see column 22, lines 12-31). Grilli only works with dual mode mobile stations and from the description in lines 29-31 of column 22, it is clear that this system will not function with single mode mobile stations. Also, because these are dual mode mobile stations, there is no need for emulation because the mobile stations can communicate with the appropriate base station using one of the mobile's native modes. For the purpose of allowing handovers, the CDMA cells are mapped in the GSM system (see in particular col. 23, lines 12-20). This means, in the context of the embodiments described in Grilli, that CDMA BTS 76 is mapped in the system as though it were a GSM-TDMA BTS (see in particular col. 22, lines 52-54).

It is clear that there are base stations of one type (e.g. CDMA) and base stations of the other type (e.g. TDMA), which have overlapping coverage zones. Thus, there is no need for a base station of one type to emulate the air interface of the base stations of the other type. Emulation is nowhere disclosed in Grilli. The passage cited by the Examiner, namely col. 23, lines 1-31, has been carefully considered but yet no such emulation can be seen therein nor derived therefrom and in fact as noted above the passage cited by the examiner actually contradicts his assertion of disclosure of emulation. Each base station always operates entirely in its native mode and has no need to perform emulation because the target mobile stations can natively communicate directly with each base station in its normal mode. For at least the above reasons, Grilli does not disclose all features of the instant claims except for the mutual help channel as urged by the examiner.

As has already been submitted in the response to the previous Office Action, a mutual help channel of a system for radio communications with mobiles is to be construed as being, in essence, an uplink channel (i.e., a channel for transmission from mobile terminals to base stations) commonly shared by all the mobile terminals of said system. Thus, it is questionable whether an adjunct system according to Raith, which may be completely independent of the radiocommunication system (*see* col. 5, line 65 – col. 6, line 4), may qualify as mutual help channel according to the invention. The applicants understand the Examiner's view when he seems to equate the adjunct system of Raith with the claimed mutual help channel, as the response to this question is not straightforward. However, applicants believe that Raith does not disclose or suggest a mutual help channel. It appears that the Examiner equates the adjunct system of Raith with the claimed second system because in the Examiner's view said second system monitors the mutual help channel of the first system. The Examiner's interpretation of Raith does not appear clearly from reading the Office Action, so that each of these two possible interpretations will be considered below.

In any case, however, it is respectfully submitted that nothing can be found in Raith to support the Examiner's contention that the adjunct system of Raith is used to allow allocating any traffic channel for communication with a terminal when a given pattern transmitted by the mobile terminal is detected on any channel monitored by said adjunct system. In col. 6, lines 14-18, it is only disclosed that "When mobile unit 530 makes an emergency access, adjunct units 540, 550 and 560 use the mobile unit's transmission on either a control channel or a traffic channel to provide information to a location processing center

570" (emphasis added). This does not imply, nor even suggest, that the emergency access is made through means of the adjunct system, namely that a given pattern is transmitted by the emergency caller on a channel of the adjunct system, nor on a channel of the radiocommunication system which would be mutually shared by terminals of the system and be monitored by the adjunct system

Therefore, whatever the Examiner's interpretation of Raith may be, nothing can be found in the above quotation of Raith that would correspond or be similar to the claimed use of the mutual help channel of the first system. It results therefore that the deficiencies in Grilli, which have been acknowledged by the Examiner, are not removed when Grilli is taken in combination with Raith.

Everything that is disclosed in the passage of Raith cited by the Examiner shows that the adjunct system of Raith is only used for allowing to pinpoint the position of an emergency caller based on standard information transmitted by its mobile unit. It is not used for allocating radio resources for the establishment of an outgoing call originating from a terminal which is beyond the area covered by base stations of its system, namely the claimed first system, but yet within the area covered by a base station of another system, namely the claimed second system. Stated otherwise, Raith's disclosure is not aimed at allowing interoperability between two radiocommunications systems by allowing terminals of a first system to communicate with a base station of a second system, said first and second systems having mutually incompatible air interfaces. Also, because Raith is a single system there is no need for emulation to accommodate incompatible systems.

One of ordinary skill in the art would not consider consulting Raith in order to remove the deficiencies in Grilli in regards to use of a mutual help channel as is recited in the claims.

For at least the above reasons, the rejection of claims 1, 8 and 10 under 35 USC § 103 should be removed. It is thus respectfully submitted that the deficiencies in Grilli et al. are not removed by combining Grilli with Raith nor with any other prior art of record. Claims 1, 8 and 10 are therefore allowable.

In regards to the dependent claims 2-7, 9 and 11, which refer to the independent claims 1, 8 and 10, respectively, it is noted that subject matter recited therein is patentable at least for the same reasons.

In view of the foregoing, Applicant respectfully requests that the outstanding rejection of Claims 1-11 under 35 U.S.C. § 103 be withdrawn.

Conclusion

It is believed that the present application is in condition for formal allowance. Accordingly, a Notice of Allowance is respectfully requested in due course. Should the Examiner determine any minor informalities that need to be addressed, he is encouraged to contact the undersigned attorney at the telephone number below.

As a last observation, it is respectfully noted that the present Office Action is the fifth one issued by the Examiner, after the Office Actions mailed August 23, 2005, March 20, 2006, November 16, 2006, and June 11, 2007, respectively. The application was filed back in 2001, and the applicants would expect issuance of the Notice of Allowance for this case not to be delayed any longer.

Respectfully submitted,

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